U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

REPORT ON RIVER GAGE STATION

REVISED, PRINTED DATES: 12/2/2009

USGS WATER RESOURCES DATA FOR CA, VOL 4, 1961-1994 USGS WENDEL HOT SPRINGS CA 7.5 MINUTE QUADRANGLE

LOCATION: Susanville STREAM: Susan River BASIN: Honey Lake

HSA: REV

#### REFERENCES:

CADWR RATING TABLE 4, 3/1/2002. CORRESPONDENCE W/CADWR NORTHERN DISTRICT OFFICE CORRESPONDENCE W/CADWR SUSANVILLE DISTRICT WATERMASTER CORRESPONDENCE W/HONEY LAKE VALLEY RESOURCE CONSERVATION DISTRICT WATERMASTER CORRESPONDENCE W/LASSEN CO. OES CORRESPONDENCE W/SUSANVILLE FIRE CHIEF CORRESPONDENCE W/USGS REDDING PERSONNEL SURFACE WATER SUPPLY OF THE U.S., PART 10, GREAT BASIN, 1951-1960 USDA SCS: FLOOD CHRONOLOGY, 1861-1976, CALVADA BASIN, E CA/W NV, 9/77 USDA SCS: WTR & RELATED LAND RESOURCES, CNTRL LAHONTAN BSN, 7/1975 USGS COMPILATION OF SURFACE WATERS OF THE U.S. THROUGH 9/1950 USGS FLOODS OF DECEMBER 1964 IN THE FAR WESTERN STATES USGS FLOODS OF JAN-FEB 1963 IN CA & NV USGS GAGING STN DESCRIPTION FOR SUSAN R @ SUSANVILLE, 1/1995 USGS JANESVILLE CA 7.5 MINUTE QUADRANGLE USGS JOHNSTONVILLE CA 7.5 MINUTE QUADRANGLE USGS LITCHFIELD CA 7.5 MINUTE QUADRANGLE USGS PK FLOW DATA, 6/1900-12/1905; 2/1917-6/1921; 10/1950-9/1994, 1/97 USGS STANDISH CA 7.5 MINUTE QUADRANGLE USGS SUSANVILLE CA 1:100,000 SCALE MAP, 1984 USGS SUSANVILLE CA 7.5 MINUTE QUADRANGLE

#### ABBREVIATIONS:

BM	- bench mark	EPA	_	Environmental Protection Agency
DS	- downstream	IBWC	-	International Boundary and Water Comm.
US	- upstream	MSRC	_	Mississippi River Commission
HW	- high water	MORC	_	Missouri River Commission
LW	- low water	NOAA	_	National Oceanic and Atmospheric Admin.
RB	- right bank	NOS	_	National Ocean Survey
LB	- left bank	NWS	_	National Weather Service
MGL	- mean gulf level	TVA	_	Tennessee Valley Authority
MLW	- mean low water	USACE	_	U.S. Army Corps of Engineers
MSL	- mean sea level	USBR	_	U.S. Bureau of Reclamation
MLT	- mean low tide	USGS	_	U.S. Geological Survey
MT	- mean tide	USWB	_	U.S. Weather Bureau
WQ	- water quality	NGVD	_	National Geodetic Vertical Datum
RM	- reference mark	NAD	_	North American Datum
RP	- reference point			

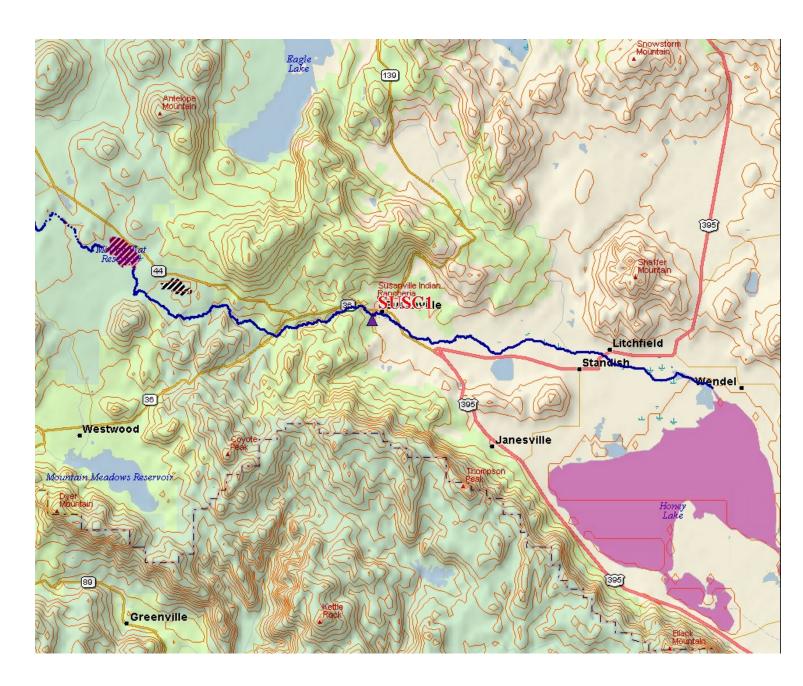
LOCATION IDENTIFICATION: SUSC1

NWS INDEX NUMBER:

USGS NUMBER: 10356500

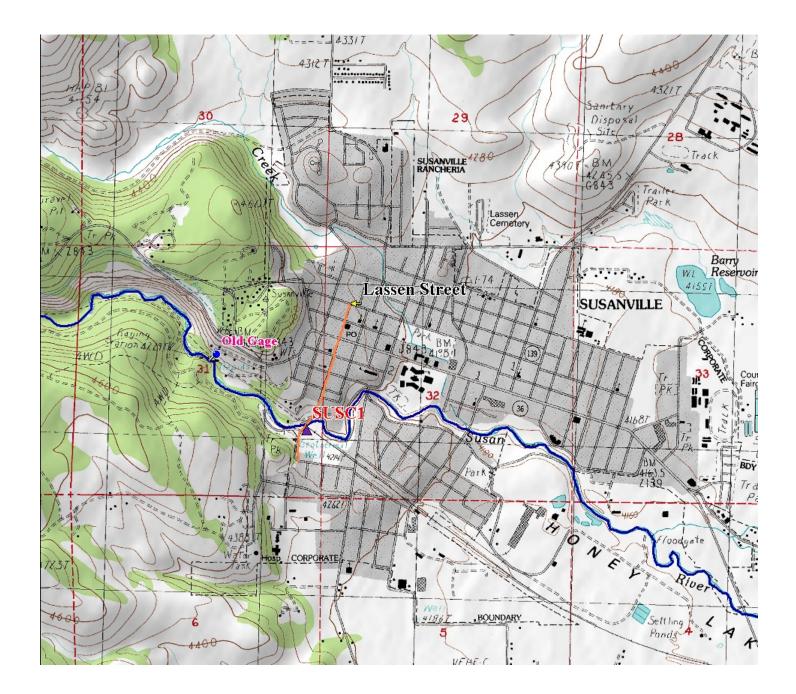
LATITUDE: 40 24 49 LONGITUDE: 120 39 51

SOURCE: CADWR

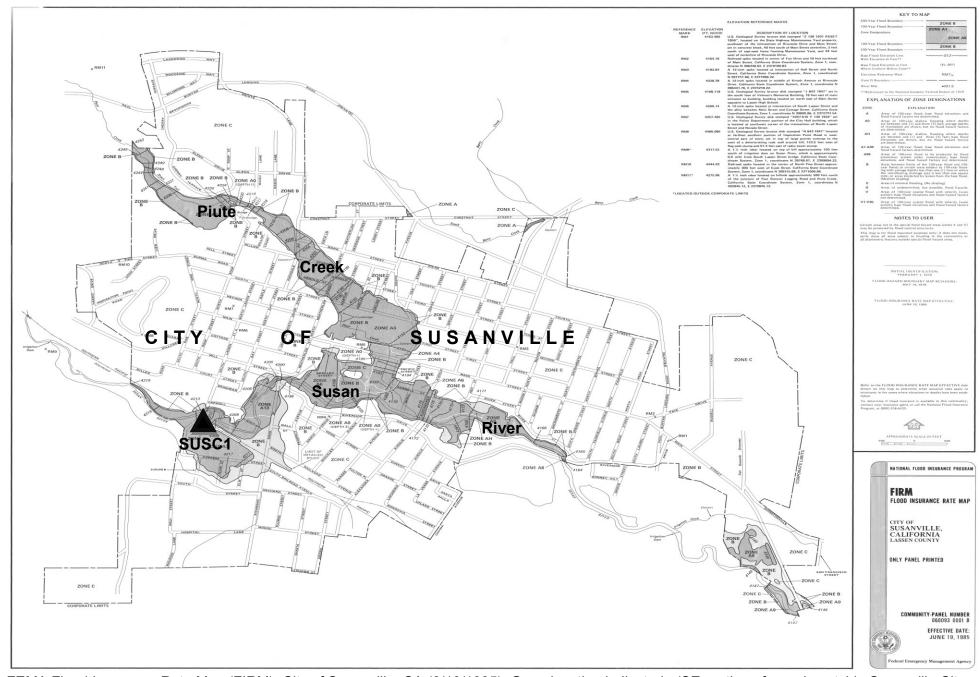


Overview of location of Susanville, CA river gage. The blue line shows the trace of the Susan River from Hog Flat reservoir downstream to Honey Lake.

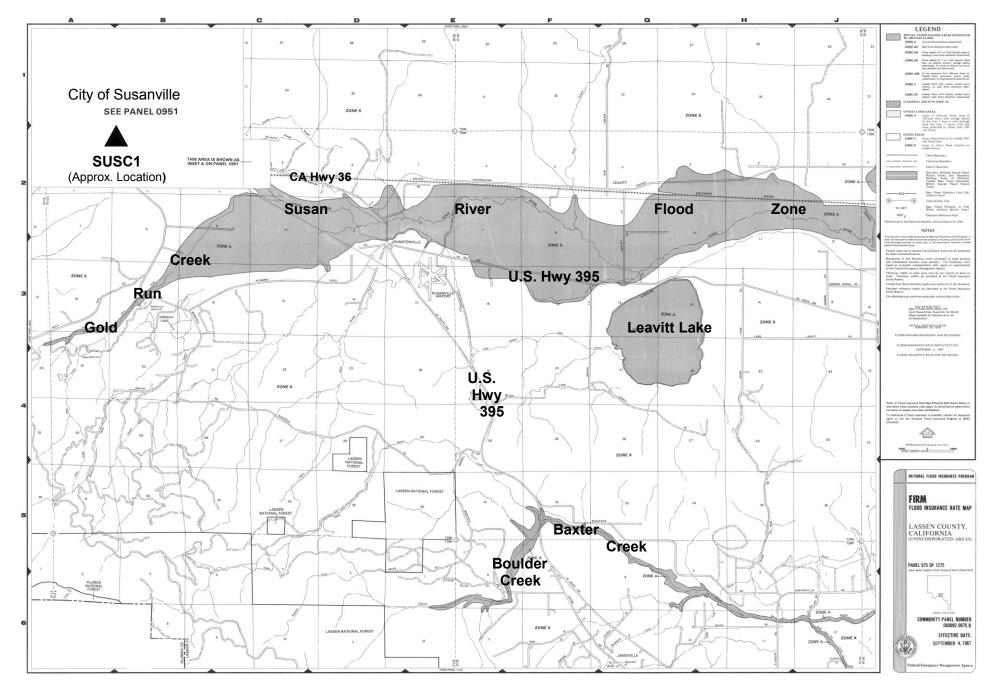
LATITUDE: 40 24 49 LONGITUDE: 120 39 51 SOURCE: CADWR



Close up view of the Susanville, CA River gage location. The gage is located on the Lassen Street Bridge in the southwest part of the town of Susanville. The blue line is the trace of the Susan River through Susanville. Also indicated is the location of the previous gage site approximately 0.5 mile upstream from the current site.

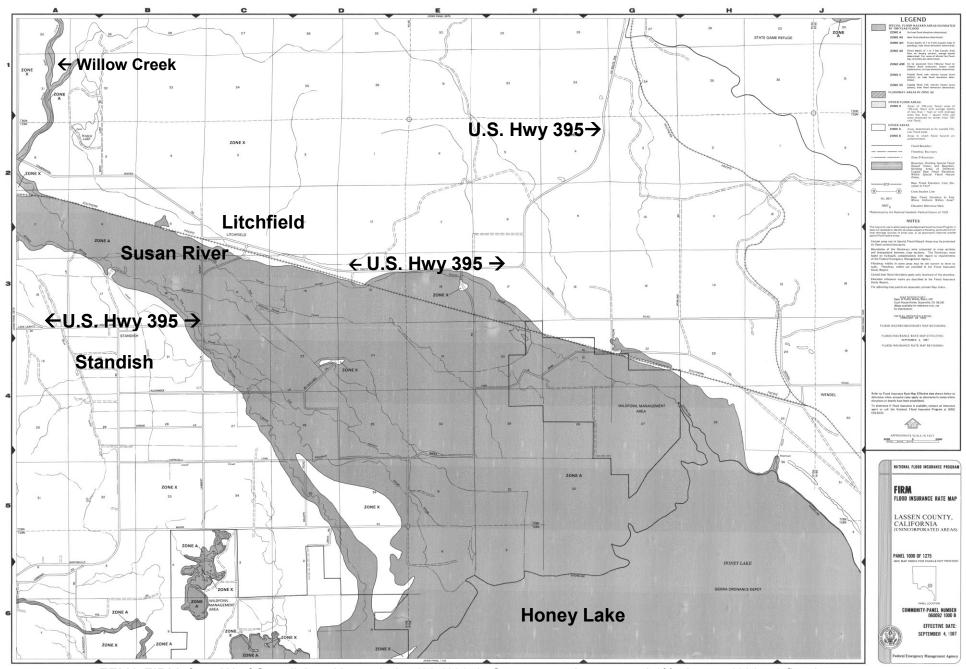


FEMA Flood Insurance Rate Map (FIRM), City of Susanville, CA (6/19/1985). Gage location indicated. (SE portion of area is outside Susanville City Limits so is not included in this map.) Dark gray areas designate annual 1% chance (100-yr) flood zone.



FEMA FIRM, E of Susanville to E of Leavitt Lake (9/4/1987). Gray areas show annual 1% chance (100-yr) flood zone. Susanville AP center of map.

ID: SUSC1



FEMA FIRM, from W of Standish to Honey Lake (9/4/1987). Gray areas show annual 1% chance (100-yr) flood zone.

LOCATION: Susan River AT Susanville, CA Revised, Printed Dates: 11/23/2009 ID: SUSC1 HSA: REV NWS FORM E-19 I

#### BENCHMARKS

ELEVATION OF GAGE ZERO: 4200.300 VERTICAL DATUM: NGVD1988 LEVELING AGENCY AND DATE: CADWR CHECKBAR: 0.000 RATING AGENCY: CADWR

BENCHMARK	DESCRIPTION	GAGE ZERO	DATUM
RM2	BRASS TABLET IN LB CABLE ANCHOR BLOCK, LEVELS OF 10/11/1989; AT OLD USGS SITE 0.5 MI. US OF CURRENT CADWR SITE.	51.060	4251.360
RM4	BRASS TABLET SET IN CONCRETE @ BASE OF NO. 2 OUTSIDE STAFF, LEVELS CHECKED 10/11/1989. AT OLD USGS SITE 0.5 MI. UPSTREAM OF CADWR SITE.	28.980	4229.280
RM5	BRASS TABLET SET IN CONCRETE WALKWAY FOOTING ON US SHOREWARD CORNER. LEVELS CHECKED 10/11/1989. AT USGS SITE 0.5 MI US OF CURRENT CADWR SITE.	45.473	4245.773
TBM1	CADWR TEMP BM, CHISELED INTO TOP OF SW WINGWALL (US, RB) OF LASSEN ST BRIDGE; PAINTED W/ORANGE "X". NGVD OF 1988. TIED INTO USGS MONUMENT LOCATED AT SUSANVILLE BANK OF AMERICA. LEVELS OF 10/15/01.	20.820	4221.120

LOCATION: Susan River AT Susanville, CA ID: SUSC1 HSA: REV

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## GAGES

DCP TELEM

NESS ID: 15C18024 TYPE OF TELEMETRY: OWNER: PHONE NUMBER: OWNER: STATECA
REPORT TIME: 00:09:00
INTERVAL: 180 INTERVAL:
PAYOR/COST OF LINE: / \$

GAGE TYPE	OWNER	MAINTENANCE	BEGAN	ENDED	GAGE LOCATION/REMARKS
FLOAT	USGS	USGS	10/10/1950	09/30/1994	ON LB @ OLD USGS SITE APPROX. 0.5 MI. US LASSEN ST. BRIDGE SITE. FP DIGITAL AND STEVENS A35 RECORDERS IN TANDEM. DRIVEN BY FLOAT THROUGH 9/13/90, THEN BY BUBBLER.
FLOAT	USGS	USGS	10/10/1950	09/13/1990	ON LB @ OLD USGS SITE 0.5 MI US OF LASSEN ST BRIDGE SITE. IN 48" STEEL STILLING WELL. DROVE RECORDER.
IS STAFF	USGS	USGS	10/10/1950	09/30/1994	ON LB @ OLD USGS SITE, APPROX. 0.5 MI. US OF LASSEN ST. BRIDGE SITE. IN ONE SECTION: 3.40-23.7'.
MANUAL	USGS	USGS	10/10/1950	09/30/1994	300' US OF OLD USGS GAGE, APPROX. 0.5 MI. US OF LASSEN ST. BRIDGE SITE. SPAN BETWEEN SUPPORTS 125', TOTAL LENGTH 250'.
STAFF	USGS	USGS	10/10/1950	09/30/1994	ON LB @ OLD USGS SITE APPROX. 0.5 MI. US OF LASSEN ST BRIDGE SITE. IN 4 SECTIONS: 1) 3.34-4.20', 2) 4.14-7.16', 3) 7.1-10.0', 4) 10.1-13.5'.
BUBBLE	USGS	USGS	09/13/1990	09/30/1994	ON LB @ OLD USGS SITE, APPROX. 0.5 MI. US OF LASSEN ST. BRIDGE SITE. DROVE RECORDER.
FLOAT	State DWR	State DWR	10/01/1994	10/01/1998	IN GAGE HOUSE ON DS RB SIDE OF LASSEN ST. BRIDGE IN SUSANVILLE. DRIVEN BY FLOAT.
FLOAT	State DWR	State DWR	10/01/1994	10/01/1998	DS RB SIDE LASSEN ST. BRIDGE IN 36" STEEL STILLING WELL. DROVE RECORDER.
STAFF	State DWR	State DWR	10/01/1994	10/01/1998	DS RB SIDE LASSEN ST. BRDG IN 2 SECTIONS: 3.0-9.0' & 8.0-17.0'.
FLOAT	State DWR	State DWR	10/01/1998		IN GAGE HOUSE ON US RB SIDE OF LASSEN ST. BRIDGE IN SUSANVILLE. DRIVEN BY FLOAT BEFORE 2/26/02, THEN BY BURBLER.
FLOAT	State DWR	State DWR	10/01/1998	02/26/2002	US RB SIDE LASSEN ST. BRIDGE IN 36" STEEL STILLING WELL. DROVE RECORDER & DCP.
STAFF	State DWR	State DWR	10/01/1998		US RB SIDE LASSEN ST BRIDGE IN 2 SECTIONS: 3.0-9.0' & 8.0-17.0'.
		State DWR			IN GAGE HOUSE ON RB US SIDE OF LASSEN ST. BRIDGE IN SUSANVILLE. DRIVEN BY BUBBLER. NESDIS ID 15C18024. REPORTS EVERY 3 HRS W/ 9 MIN. OFFSET.
BUBBLE	State DWR	State DWR	02/26/2002		IN GAGE HOUSE ON US RB SIDE OF LASSEN ST. BRIDGE. DRIVES RECORDER & DCP.

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# HISTORY

PUBLICATION/LOCATION OF R	ECORDS	STARTING DATE	ENDING DATE
USDA SUSAN R FLD CHRON. USGS PEAK FLOW DATA USGS WATER RESOURCES DATA USGS PEAK FLOW DATA USGS PEAK FLOW DATA USGS STAN DESC., SUSC1 USGS FLDS OF 12/1964		01/01/1861 06/01/1900 06/01/1900 02/01/1917 10/10/1950 10/10/1950 12/01/1964	09/30/1994
TYPE OF GAGE	OWNER	STARTING DATE	ENDING DATE
TYPE OF GAGE	USGS USGS USGS USGS USGS USGS State DWR	10/10/1950 10/10/1950 10/10/1950 10/10/1950 10/10/1950 00/13/1990 10/01/1994 10/01/1994 10/01/1994 10/01/1998 10/01/1998 10/01/1998 04/12/2000 02/26/2002	09/30/1994 09/13/1990 09/30/1994 09/30/1994 09/30/1994 10/01/1998 10/01/1998 10/01/1998
ZERO ELEVATION			
4225.720 4222.320 4200.300		STARTING DATE  10/01/1950 09/13/1990 10/01/1994	

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# CRESTS

FLOOD STAGE: 12.00 ACTION STAGE: 10.50 BANKFULL STAGE: FLOOD FLOW: 2400 ACTION FLOW: 1770

	LST	(ft)	(CFS)	FROM HIGH WATERMARKS	BASED ON OLD DATUM	CAUSED BY ICE JAM	
02/23/1901							STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @
03/30/1903	UNDEF	11.75	2280				STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @
02/22/1904	UNDEF	11.50	2190				STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @
01/17/1921	UNDEF	8.56	1070				STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @
11/19/1950	UNDEF	10.59	1800				STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 5.30'.
04/04/1952	UNDEF	10.91	1930				STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 5.32'.
01/09/1953	UNDEF	11.70	2260				STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 5.50'.
03/09/1954	UNDEF	9.50	1390				STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 4.89'.
12/23/1955	UNDEF	14.40	3540	X			STG FM DWR RT4 (2/1/02) EXTN. STG @ USGS SITE 6.62', FLOW EST FM SLOPE AREA.
02/24/1957	UNDEF	10.33	1700				STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 5.23
02/24/1958	UNDEF	13.93	3300				STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 6.46
02/08/1960	UNDEF	10.54	1780				STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 5.30
01/31/1963	UNDEF	15.10	3900				STG EST. FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 6.78'.
12/22/1964	UNDEF	17.23	5100				STG EST. FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 7.30'.
01/29/1967	UNDEF	9.67	1450				STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 5.51'.
01/21/1969	UNDEF	13.71	3190				STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 6.46'.
01/24/1970	UNDEF	18.47	5850	X			STG FM DWR RT4 (2/1/02) EXTN. STG @ USGS SITE 8.89', FLOW EST FM SLOPE AREA.
03/26/1971	UNDEF	12.29	2520				STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 6.10'.
03/30/1974	UNDEF	13.73	3200				STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 6.69'.
01/13/1980	UNDEF	14.85	3770				STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 7.02'.
11/23/1981	UNDEF	16.30	4560	X			STG FM DWR RT4 (2/1/02) EXTN. STG @ USGS SITE 7.95', FLOW EST FM SLOPE AREA.
03/13/1983	UNDEF	13.00					STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 6.69'.
11/24/1983							STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 5.29'.
02/17/1986							STG EST. FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 8.33'.
03/11/1989							STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 6.59'.
03/17/1993							STG FROM CADWR RTG #4 (2/1/02) EXTENSION. STG @ OLD SITE/DATUM 8.57'.
01/02/1997							STG FM DWR RT4 (2/1/02) EXTN. STG @ USGS SITE 11.75', FLOW EST FM SLOPE AREA.
02/18/2004 12/31/2005							FROM CDEC, RT4 (2/1/02). FROM CDEC, RT4 (2/1/02).

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# LOW WATER RECORDS

DATE OF LOW WATER	STAGE (ft)	FLOW (CFS)	REMARKS
08/10/1918	3.22	1	STG FROM CADWR RTG #4 (2/1/02), 0.8 CFS
09/10/1951	3.27	3	STG FROM CADWR RTG #4 (2/1/02), 2.5 CFS.
10/01/1951	3.30	4	STG FROM CADWR RTG #4 (2/1/02), 4.0 CFS.
09/11/1953	3.37	7	STG FROM CADWR RTG #4 (2/1/02), 6.5 CFS.
09/10/1954	3.29	4	STG FROM CADWR RTG #4 (2/1/02), 3.6 CFS.
08/16/1955	3.27	3	STG FROM CADWR RTG #4 (2/1/02), 2.6 CFS.
10/03/1955	3.29	4	STG FROM CADWR RTG #4 (2/1/02), 3.5 CFS.
09/08/1957	3.34	6	STG FROM CADWR RTG #4 (2/1/02), 5.6 CFS.
09/21/1958	3.39	7	STG FROM CADWR RTG #4 (2/1/02), 7.4 CFS.
08/05/1959	3.27	3	STG FROM CADWR RTG #4 (2/1/02), 2.6 CFS.
07/25/1960	3.22	1	STG FROM CADWR RTG #4 (2/1/02), 0.8 CFS
08/22/1960	3.22	1	STG FROM CADWR RTG #4 (2/1/02), 0.8 CFS
08/15/1961	3.20	0	STG FROM CADWR RTG #4 (2/1/02), ZERO FLOW
10/06/1961	3.25	2	STG FROM CADWR RTG #4 (2/1/02), 1.7 CFS.
08/18/1962	3.25	2	STG FROM CADWR RTG #4 (2/1/02), 1.7 CFS.
09/02/1963	3.26	2	STG FROM CADWR RTG #4 (2/1/02), 2.3 CFS.
09/08/1964	3.27	3	STG FROM CADWR RTG #4 (2/1/02), 2.6 CFS.
10/02/1964	3.29	3	STG FROM CADWR RTG #4 (2/1/02), 3.3 CFS.
07/27/1966	3.22	1	STG FROM CADWR RTG #4 (2/1/02), 0.8 CFS
10/01/1966	3.27	3	STG FROM CADWR RTG #4 (2/1/02), 2.8 CFS.
08/12/1968	3.25	2	STG FROM CADWR RTG #4 (2/1/02), 1.7 CFS.
10/03/1968	3.30	4	STG FROM CADWR RTG #4 (2/1/02), 3.9 CFS.
07/29/1970	3.38	7	STG FROM CADWR RTG #4 (2/1/02), 7.0 CFS.
10/01/1970	3.40	8	STG FROM CADWR RTG #4 (2/1/02). 7.8 CFS.
08/26/1972	3.31	4	STG FROM CADWR RTG #4 (2/1/02), 4.3 CFS.
08/08/1973	3.31	4	STG FROM CADWR RTG #4 (2/1/02), 4.4 CFS.
10/02/1973	3.41	8	STG FROM CADWR RTG #4 (2/1/02). 8.4 CFS.
09/07/1975	3.44	10	STG FROM CADWR RTG #4 (2/1/02), 9.5 CFS.
07/21/1976	3.28	3	STG FROM CADWR RTG #4 (2/1/02), 3.2 CFS
07/29/1977	3.24	1	STG FROM CADWR RTG #4 (2/1/02), 1.4 CFS
09/03/1978	3.29	4	STG FROM CADWR RTG #4 (2/1/02), 3.6 CFS.
08/09/1979	3.21	0	STG FROM CADWR RTG #4 (2/1/02), 0.44 CFS
10/07/1979	3.26	2	STG FROM CADWR RTG #4 (2/1/02), 2.4 CFS.
08/13/1981	3.24	2	STG FROM CADWR RTG #4 (2/1/02), 1.6 CFS.
10/01/1981	3.31	4	STG FROM CADWR RTG #4 (2/1/02), 4.3 CFS.
10/16/1982	3.53	13	STG FROM CADWR RTG #4 (2/1/02), 13.0 CFS.
09/10/1984	3.35	6	STG FROM CADWR RTG #4 (2/1/02), 5.7 CFS.
08/25/1985	3.27	3	STG FROM CADWR RTG #4 (2/1/02), 2.8 CFS.
11/13/1985	3.32 3.23	5 1	STG FROM CADWR RTG #4 (2/1/02), 4.8 CFS. STG FROM CADWR RTG #4 (2/1/02), 1.2 CFS
08/29/1987 08/13/1988	3.23	1	STG FROM CADWR RTG #4 (2/1/02), 1.2 CFS STG FROM CADWR RTG #4 (2/1/02), 0.68 CFS
08/22/1989	3.22	1	STG FROM CADWR RTG #4 (2/1/02), 0.00 CFS STG FROM CADWR RTG #4 (2/1/02), 0.94 CFS
09/07/1990	3.20	0	STG FROM CADWR RTG #4 (2/1/02), 0.14 CFS
08/12/1991	3.20	0	STG FROM CADWR RTG #4 (2/1/02), 0.14 CFS STG FROM CADWR RTG #4 (2/1/02), 0.3 CFS
08/19/1992	3.21	0	STG FROM CADWR RTG #4 (2/1/02), 0.38 CFS
10/03/1992	3.21	1	STG FROM CADWR RTG #4 (2/1/02), 0.51 CFS
08/14/1994	3.21	0	STG FROM CADWR RTG #4 (2/1/02), 0.31 CFS STG FROM CADWR RTG #4 (2/1/02), 0.29 CFS
08/15/2001	3.25	2	STG FROM CADWR RTG #4 (2/1/02), 0.25 CFS.
08/21/2002	3.27	2	FROM CADWR RTG #4 (2/1/02)
11/02/2002	3.28	2	FROM CADWR RTG #4 (2/1/02)
02/05/2004	3.32	3	FROM CADWR RTG #4 (2/1/02)
10/01/2004	3.32	6	FROM CADWR RTG #4 (2/1/02)
12/16/2005	3.31	3	FROM CADWR RTG #4 (2/1/02)
,,,	0.01	3	

LOCATION: Susan River AT Susanville, CA
ID: SUSC1 HSA: REV

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## CONDITIONS AFFECTING FLOW

MILES ABOVE MOUTH: 0.0 DRAINAGE AREA: 184.0 POOL STAGE: 0.0

STREAM BED: SAND AND GRAVEL, ONE CHANNEL @ ALL STGS.

REACH: MC COY FLAT RESERVOIR 20.3 MI. US, TO HONEY LAKE, ABOUT 24 MILES DS.

REGULATION: FLOW REGULATED BY MC COY FLAT AND HOG FLAT RESERVOIRS; COMBINED CAPACITY, 25,300 AF. THESE RESERVOIRS USUALLY GO DRY IN SUMMER. TOTAL AREA OF DRAINAGE COVERED BY LAKES AND RESERVOIRS 3.5 SQ. MILES.

DIVERSION: RAMSEY DITCH 0.5 MI. US DIVERTS UP TO 5 CFS IN SUMMER.

WINTER: SUBSTANTIAL ICE EFFECT IN WINTER, ESPECIALLY DURING LOW FLOWS.

TOPOGRAPHY: ELEV FROM 4200' @ GAGE TO 7650' @ COYOTE PK. FAIRLY FLAT SWAMPY VALLEYS >5600', ~13 MI US OF GAGE, THEN STREAM FLOWS THRU MODERATELY STEEP CYN TO GAGE. MOSTLY CONIFEROUS FOREST W/MEADOWS ABV GAGE. AT GAGE MOSTLY DECIDUOUS TREES W/STEEP BANKS, BOULDERS.

REMARKS: CHANNEL FAIRLY STRAIGHT US W/ROCK RIFFLES. CHANNEL TURNS TO RT DS ABOUT 200'. BOTTOM OF BRIDGE DECK ABOUT 13.5' STAGE, RTG UNRELIABLE ABOVE THIS STG. HOMES ALONG BOTH BANKS NR

LOCATION: Susan River AT Susanville, CA ID: SUSC1

HSA: REV

Revised, Printed Dates: 12/2/2009 NWS FORM E-19 PAGE 7: CONDITIONS

#### DAMAGE

#### STAGE AREAS AFFECTED

10.50 Monitoring stage. Localized minor lowland flooding below Susanville in Johntonville, Leavitt Lake, Standish, and Litchfield rural areas.

- 11.00 Local minor lowland flooding below Susanville in Johnstonville, Leavitt Lake, Standish, and Litchfield rural areas.
- 11.50 Localized minor to moderate lowland flooding below Susanville in the Johnstonville, Leavitt Lake, Standish, and Litchfield rural areas.
- 12.00 Flood Stage. Several homes on Carroll Street in Susanville begin to flood. Local flooding in Susanville from Lassen Street downstream along Riverside Drive, especially below Piute Creek which enters river near Alexander Drive. Moderate lowland flooding below Susanville in Johnstonville, Leavitt Lake, Standish, and Litchfield areas. Some rural roads affected by flooding.
- 12.50 Minor to moderate flooing in Susanville from Lassen Street downstream along Riverside Drive. Several homes along river affected, especially on Carroll Street. Moderate lowland flooding below Susanville in Johnstonville, Leavitt Lake, Standish, and Litchfield areas. Rural roads and bridges begin to flood in these areas.
- 13.00 Moderate flooding in Susanville from Lassen Street downstream along Riverside Drive. Some homes along river have moderate flood affects, especially on Carroll Street. Significant lowland flooding below Susanville in Johnstonville, Leavitt Lake, Standish, and Litchfield areas. Rural roads and bridges in these areas flood. Similar to flood of 3/13/1983.
- 13.50 Moderate to major flooding in Susanville, Johnstonville, Leavitt Lake, Standish, and Litchfield. Susanville flooded from Lassen Street downstream along Riverside Drive and from Cornell/River Street on north to Hood Street/Sunkist Drive on south. River up to botton of Lassen Street bridge. Many homes along river have minor to moderate flooding. Many roads and bridges in the Honey Lake Valley area flood, with moderate transportation impacts. Similar to 3/30/1974 and 1/21/1969 floods.
- 14.00 Major flooding in Susanville, Johnstonville, Leavitt Lake, Standish, and Litchfield. Susanville flooded from Lassen Street downstream along Riverside Drive and from Main St (Highway 36) on north to railroad tracks on south. Many homes, businesses, schools, roads, and bridges in the Honey Lake Valley area flooded. Serious transportation impacts. Impacts to power, phone, and rural water systems begin. Similar to 2/24/1958 flood.
- 14.50 Major flooding in Susanville, Johnstonville, Leavitt Lake, Standish, and Litchfield areas in Honey Lake Valley. Susanville flooded from Lassen Street downstream along Riverside Drive and from Main Street (Highway 36) on north to railroad tracks on south. Serious flood impacts to homes, businesses, schools, roads, and bridges throughout Honey Lake Valley. US Highway 395 flooded. Serious transportation impacts, moderate impacts to power, phone, and rural water systems. Similar to 12/23/1955 flood.
- 15.00 Major flooding in Susanville, Johnstonville, Leavitt Lake, Standish, and Litchfield areas. Major flooding in Susanville from Lassen Street downstream along Riverside Drive, and from Main Street (Highway 36) on north to railroad tracks on south. Serious flood impacts to homes, businesses, schools, roads, and bridges throughout Honey Lake Valley. US Highway 395 flooded. Serious transportation, power, phone, and rural water system impacts. Similar to 1/31/1963 and 1/13/1980 floods.
- 15.50 Major flood damage from Susanville to Honey Lake. Flooding of homes, businesses and schools in flood plain throughout Honey Lake Valley, including Susanville. Extensive damage to transportation systems as roads, bridges, and culverts are flooded or washed out. US Highway 395 is flooded.

  Major transportation, power, phone, and rural water system impacts. Similar to 1/31/1963 flood.
- 16.00 Extensive flood damage from Susanville to Honey Lake. Serious flood impacts to homes, businesses, schools, roadways, and bridges in flood plain throughout Honey Lake Valley. Transportation impacts may be serious as US Highway 395 and Highway 36 are flooded. Extensive power, phone, and rural water system impacts. Similar to 11/23/1981 flood.
- 16.50 Extensive flood damage from Susanville to Honey Lake with flooding of homes, businesses, schools, roadways, brides, and water systems in flood plain throughout Honey Lake Valley. Extensive transportation, power, phone, and rural water system impacts. US Highway 395 and Highway 36 flooded. Similar to 11/23/1981 flood.
- 17.00 Flood disaster from Susanville to Honey Lake. Extensive flooding of homes, businesses, schools, roadways, bridges, and water systems in flood plain throughout Honey Lake Valley. Transportation very difficult as US Highway 395 and Highway 36 flooded or washed out. Extensive power, phone, and rural water system impacts. Slightly less severe than floods of 12/22/1964, 2/17/1986, and 1/02/1997.
- 17.50 Disastrous flooding, with near record flooding from Susanville to Honey Lake. Extensive damage to homes, businesses, schools, roadways, bridges, and water systems in flood plain throughout Honey Lake Valley. Transportation in valley very difficult as US Highway 395 and Highway 36 flooded or washed out. Extensive power, phone, and rural water system impacts. Similar to floods of 12/22/1964, 2/17/1986, and 1/02/1997.

LOCATION: Susan River AT Susanville, CA Revised, Printed Dates: 12/2/2009
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## DAMAGE

## STAGE AREAS AFFECTED

18.00 Near record flooding from Susanville to Honey Lake. Extensive damage to homes, businesses, schools, roads, bridges, and water systems in flood plain throughout Honey Lake Valley, including Susanville area. Transportation in and out of Honey Lake Valley cut off as US Highway 395 and Highway 36 flooded or washed out. Extensive power, phone, and rural water system impacts. Only exceeded by flood of 1/24/1970.

18.50 Record flooding from Susanville to Honey Lake. Extensive damage to homes, businesses, schools, road, bridges, and water systems throughout Honey Lake Valley, including Susanville area. Transportation in and out of valley cut off, as US Highway 395 and Highway 36 is flooded or washed out. Extensive power, phone, and rural water system impacts. Exceeds record flood of 1/24/1970.

LOCATION: Susan River AT Susanville, CA Revised, Printed Dates: 12/2/2009 NWS FORM E-19 PAGE 8-2: DAMAGE

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# RIVER STAGE DATA

	1 23-1		
	11		
	ii		
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	1 19-1		
18.50 - Record flooding from Susanville to Honey Lake. Extensive damage to homes, businesses,	ii	18 47	01/24/1970
schools, road, bridges, and water systems throughout Honey Lake Valley, including	ii	10.17	01/21/10/0
Susanville area. Transportation in and out of valley cut off, as US Highway 395 and	ii		
Highway 36 is flooded or washed out. Extensive power, phone, and rural water system	17-1	17.31	01/02/1997
impacts. Exceeds record flood of 1/24/1970.	11		,,
18.00 - Near record flooding from Susanville to Honey Lake. Extensive damage to homes,	ii	16.30	11/23/1981
businesses, schools, roads, bridges, and water systems in flood plain throughout	ii		,,
Honey Lake Valley, including Susanville area. Transportation in and out of Honey	ii		
Lake Valley cut off as US Highway 395 and Highway 36 flooded or washed out.	i 15-i	15.10	01/31/1963
Extensive power, phone, and rural water system impacts. Only exceeded by flood of		14.85	01/13/1980
1/24/1970.	ii		12/23/1955
17.50 - Disastrous flooding, with near record flooding from Susanville to Honey Lake.	ii	13.93	02/24/1958
Extensive damage to homes, businesses, schools, roadways, bridges, and water systems	ii	13.73	03/30/1974
in flood plain throughout Honey Lake Valley. Transportation in valley very difficult	i 13-i		
as US Highway 395 and Highway 36 flooded or washed out. Extensive power, phone, and	ii	13.00	03/13/1983
rural water system impacts. Similar to floods of 12/22/1964, 2/17/1986, and	ii	12.29	03/26/1971
1/02/1997.	ii		
17.00 - Flood disaster from Susanville to Honey Lake. Extensive flooding of homes,		11.75	03/30/1903
businesses, schools, roadways, bridges, and water systems in flood plain throughout	11-1		
Honey Lake Valley. Transportation very difficult as US Highway 395 and Highway 36		10.91	04/04/1952
flooded or washed out. Extensive power, phone, and rural water system impacts.		10.59	11/19/1950
Slightly less severe than floods of 12/22/1964, 2/17/1986, and 1/02/1997.			
16.50 - Extensive flood damage from Susanville to Honey Lake with flooding of homes,		9.67	01/29/1967
businesses, schools, roadways, brides, and water systems in flood plain throughout	9-	9.33	03/17/1993
Honey Lake Valley. Extensive transportation, power, phone, and rural water system			
impacts. US Highway 395 and Highway 36 flooded. Similar to 11/23/1981 flood.		8.56	01/17/1921
16.00 - Extensive flood damage from Susanville to Honey Lake. Serious flood impacts to homes,			
businesses, schools, roadways, and bridges in flood plain throughout Honey Lake			
Valley. Transportation impacts may be serious as US Highway 395 and Highway 36 are	7-		
flooded. Extensive power, phone, and rural water system impacts. Similar to			
11/23/1981 flood.			
15.50 - Major flood damage from Susanville to Honey Lake. Flooding of homes, businesses and			
schools in flood plain throughout Honey Lake Valley, including Susanville. Extensive			
damage to transportation systems as roads, bridges, and culverts are flooded or	5-		
washed out. US Highway 395 is flooded. Major transportation, power, phone, and rural			

REACH: MC COY FLAT RESERVOIR 20.3 MI. US, TO HONEY LAKE, ABOUT 24 MILES DS. ELEVATION ZERO: 4200.30

LOCATION: Susan River AT Susanville, CA
ID: SUSC1

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NWS FORM E-19 PAGE 9: STAFF

# CONTACTS\*

SQ	CONTACT/REMARKS	PHONE
1	Kieth Wemple-Honey Lake Valley Watermaster Mr. Wemple is Honey Lake Valley Resource Conservation District Watermaster.	1-530-257-7271
2	John Clements-CADWR Northern District Chief Mr. Clements maintains records for SUSC1 gage. EMAIL: clements@water.ca.gov	1-530-529-7323
3	Chip Jackson-Lassen Co. Emergency Manager Mr. Jackson has good knowledge of flood operations and flood problem areas in the County. FAX:530-251-2519. EMAIL: ChipJackson@frontiernet.net	1-530-251-8011
4	Stuart Ratner-Susanville Fire Chief Mr. Ratner has an excellent knowledge of flood problem areas within Susanville. EMAIL: <a href="mailto:sratner@cityofsusanville.org">sratner@cityofsusanville.org</a>	1-530-257-5152
5	Chris Gallagher-Susanville Police Chief EMAIL: chief@cityofsusanville.org	1-530-257-6121
5	USGS WRD Redding, CA USGS Redding maintained gage through 9/1994, and has good information about their gage and flooding in the area.	1-530-246-5282

 ${}^{\star}\text{Note:}$  Only phone numbers and email addresses also available on agency websites are listed here.

LOCATION: Susan River AT Susanville, CA
ID: SUSC1 HSA: REV Revised, Printed Dates: 12/2/2009
NWS FORM E-19 PAGE 10: CONTACTS

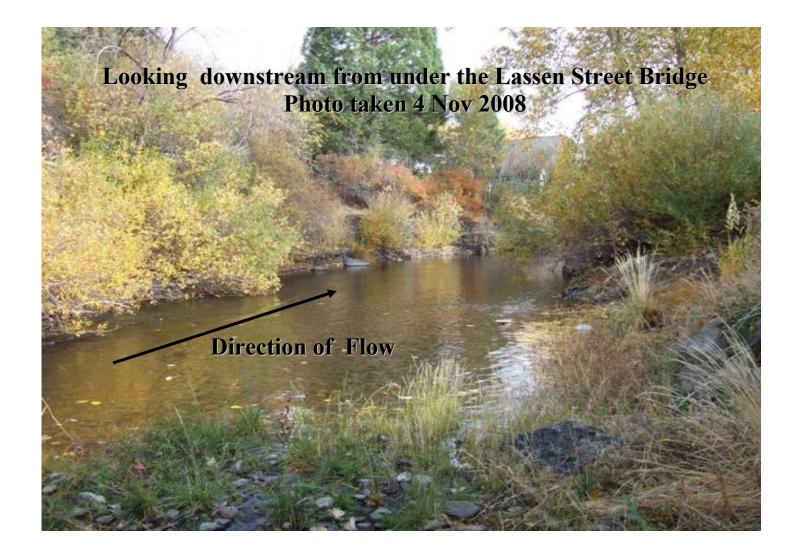


Photo taken looking downstream from the Lassen Street Bridge. Structure in the distance is a house located on the left bank downstream from the gage site.

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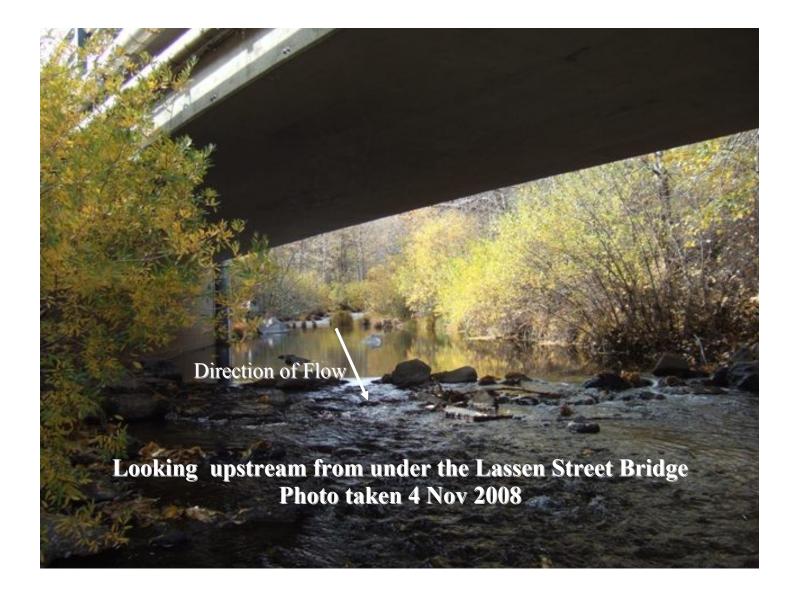


Photo taken looking upstream from just below the Lassen Street Bridge. There is a road and a few houses on the left bank well above the level of the river. These are concealed by the trees in the picture.

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Photo showing location of outside staff gages at the Susanville, CA river gage. The lower staff gage has a range of 4.5 feet to 9.0 feet. The photo was taken with the water level approximately 0.5 feet below the bottom of the lower staff gage. The upper staff has a range of 8.0 feet to approximately 17.0 feet.